

CLAIMS

1. A method for zooming in an image that is being presented on a display device connected to a storage unit, wherein said presentation image is loaded to the display device from said storage unit and said presentation image comprises at least one preselected, zoomable area, said method comprising the steps of:

5 continuously zooming (26) in on the preselected area 10 in the presentation image,

15 during the step of continuous zooming, loading (28) a detail image information data set to the display device from the storage unit, wherein said detail image information data set is used for presenting the preselected area in higher resolution than in the presentation image, and

20 improving (30) the resolution of the zoomed-in-on, preselected area in the presentation image on the display device by means of the loaded detail image information data set when the zooming in on the preselected area in the presentation image is complete.

2. The method according to claim 1, wherein the detail image information data set comprises a difference image, said difference image representing the difference between the zoomed-in-on, preselected area in the presentation image and a detail image representing the zoomed-in-on, preselected area in higher resolution.

30 3. The method according to claim 2, wherein the step of improving the resolution comprises the steps of adding the difference image to the zoomed-in-on, preselected area in the presentation image to generate a detail image of the zoomed-in-on, preselected area in higher resolution and replacing the zoomed-in-on, preselected area 35 in the presentation image on the display device by the detail image.

4. The method according to claim 1, wherein the detail image information data set comprises a detail image representing the preselected area in higher resolution than the presentation image.

5. The method according to claim 4, wherein the step of improving the resolution comprises the step of replacing the zoomed-in-on, preselected area in the presentation image on the display device with the detail image when the zooming in on the preselected area in the presentation image is complete.

6. The method according to claim 3 or 5, further comprising the step of zooming out from a detail image that is being presented on the display device, said step of zooming out comprising the steps of:

replacing the detail image on the display device by the corresponding completely zoomed-in-on, preselected area in the presentation image,

subsequently continuously zooming out from the corresponding area of the presentation image until the entire presentation image is presented.

25 7. The method according to claim 1, wherein the presentation image is being presented in a window on the display device and wherein the continuous zooming is performed in the same window, whereby the preselected area is expanded/reduced over the presentation image so
30 that the preselected area gradually covers a greater/smaller part of the presentation image.

8. The method according to claim 1, wherein the presentation image is being presented in a window on the display device and wherein the continuous zooming is performed in the same window so that a gradually

smaller/greater part of the presentation image is shown in the window during the continuous zooming.

9. The method according to claim 7 or 8, wherein the
5 detail image fills the window when replacing the zoomed-in-on, preselected area in the presentation image.

10. The method according to claim 1, wherein the boundaries of the preselected, zoomable areas in the
10 presentation image are indicated in the presentation image to highlight the preselected, zoomable areas.

11. The method according to claim 3 or 4, wherein a detail image comprises preselected, zoomable areas and
15 zooming in on one of these preselected areas is performed in the same manner as for the presentation image.

12. The method according to claim 3, wherein meta data is associated with at least one of the presentation
20 image and the detail images.

13. The method according to claim 4, wherein meta data is associated with at least one of the presentation image and the detail images.

25 14. The method according to claim 12 or 13, wherein the meta data comprises search criteria to enable a user to search for a specific detail image.

30 15. The method according to claim 14, wherein a search results in a pointer to a requested detail image and a step of presenting the requested detail image comprises the steps of:

35 determining a current image, which is the image that is currently presented on the display device,

determining a common image for the current image and the requested image, which is the image of largest scale

that includes both an area corresponding to the current image and an area corresponding to the requested image,

zooming out from the current image to the common image, and

5 zooming in from the common image to the requested image.

16. The method according to claim 12 or 13, wherein the meta data associated with an image is shown when the 10 image is presented on the display device.

17. The method according to claim 12 or 13, wherein the meta data associated with a detail image is shown when a marker on the display device is in a corresponding 15 area of the presentation image.

18. The method according to claim 1, wherein the preselected areas are arbitrarily orientated in the presentation image.

20 19. The method according to claim 18, wherein the continuous zooming in the presentation image includes a simultaneous rotation of the presentation image to fit the orientation of the preselected area into the window.

25 20. A method for generating an image for electronic presentation, comprising the steps of:

determining (2) a main image that the presentation is to be based on,

30 generating (4) a presentation image from the main image by compressing and reducing the information in the main image,

selecting (10) areas in the main image that are to be presentable in a higher resolution than corresponding 35 areas in the presentation image,

generating (12) detail image information data sets for the selected areas from the main image, wherein the

detail image information data sets are used for presenting the preselected areas in higher resolution than corresponding areas in the presentation image, and
5 associating the detail image information data sets with the corresponding areas in the presentation image to enable a load of one detail image information data set simultaneously with a continuous zooming in on the corresponding area of the presentation image.

10 21. The method according to claim 20, wherein the step of generating a detail image information data set comprises the step of generating a detail image for the selected area from the main image, wherein the detail image represents the selected area in higher resolution
15 than the corresponding area in the presentation image.

20 22. The method according to claim 21, wherein the step of generating a detail image information data set further comprises the steps of zooming in on the corresponding area in the presentation image to the selected area, computing the difference between the zoomed-in-on, corresponding area in the presentation image and the detail image to generate a difference image and storing the difference image in the detail image information data
25 set.

30 23. The method according to claim 21, wherein the step of generating a detail image information data set further comprises the step of storing the detail image in the detail image information data set.

24. The method according to claim 21, wherein the generated presentation image and the generated detail images are of the same size.

25. The method according to claim 20, wherein the selected areas are arbitrarily orientated in the main image.

5 26. The method according to claim 25, further comprising the step of rotating the detail images so that they are oriented in the same way as the presentation image.

10 27. The method according to claim 21, further comprising the steps of:

15 selecting a subarea within a selected area in the main image, wherein the subarea is to be presentable in a higher resolution than the corresponding subarea in the selected area,

extracting information from the subarea in the main image to generate a detail image of the subarea, and

20 associating the detail image of the subarea with the corresponding area in the detail image of the selected area.

28. The method according to claim 21, further comprising the steps of:

25 determining an additional main image of a selected area in the original main image depicting the selected area in higher resolution than the main image, and

compressing the additional main image to generate a detail image.

30 29. The method according to claim 21, wherein meta data is associated with at least one of the presentation image and the detail images.

35 30. The method according to claim 29, wherein the meta data includes search criteria to enable a search for a specific image, the specific image being presented as a result of the search.

31. The method according to claim 21, wherein the step of generating a detail image comprises the step of transforming a view in a first perspective of an object 5 in the selected area into a view in a second perspective of the object.

32. The method according to claim 21, wherein a corresponding area showing an object in a first 10 perspective is replaceable, during presentation, by a detail image generated from an additional main image that shows the object in a second perspective.